

## OSCILLATOR

### ABSTRACT OF THE DISCLOSURE

An oscillator with reduced phase noise. The oscillator includes a resonance circuit and an amplifying circuit. The amplifying circuit has an amplifier. An impedance element having a frequency characteristic is connected to the amplifier and, therefore, the power amplification of the amplifying circuit is decreased by at least 3 dB in a frequency band lower than about 0.5 times an oscillating frequency  $f_o$  or higher than about  $2f_o$ , as compared to the power amplification of said amplifying circuit at the oscillating frequency  $f_o$ .